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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,751	07/19/2004	Hiroyuki Keduka	2922-480	1121
6449 7590 09/25/2008 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
EXAMINER ROE, JESSEE RANDALL				
ART UNIT		PAPER NUMBER		
1793				
NOTIFICATION DATE		DELIVERY MODE		
09/25/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/501,751

Applicant(s)

KEDUKA ET AL.

Examiner

Jessee Roe

Art Unit

1793

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Status of the Claims

Claims 1 and 5-8 are pending and claims 2-4 are canceled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrano et al. (US 6,139,652).

In regards to claim 1, Carrano et al. ('652) discloses a silver alloy composition having at least about 99.5 weight percent with the balance selected from the group consisting of aluminum, antimony, cadmium, gallium, germanium, indium, lithium, manganese, magnesium, silicon, tin, titanium, and zinc (col. 1, lines 48-58 and Tables 1-3). The Examiner notes that the compositions disclosed by Carrano et al. ('652) overlap the compositions of the instant invention, which is a prima facie case of obviousness. See MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the claimed amounts of indium and tin from the compositions disclosed by Carrano et al. ('652) because Carrano et al. ('652) discloses the same utility throughout the disclosed ranges.

With respect to the recitation "for use in a reflection coating for an optical

recording medium", the Examiner notes that this recitation would not limit the structure of the silver alloy. Therefore, this recitation has been considered an intended use of the silver alloy. MPEP 2111.02 II.

In regards to claim 5, Carrano et al. ('652) discloses hardening by internal oxidation (col. 1, lines 58-67).

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrano et al. (US 6,139,652) alone, or alternatively in view of Okamura et al. (US 6,104,530).

In regards to claims 6 and 8, Carrano et al. ('652) disclose a silver alloy composition as shown above. Although Carrano et al. ('652) do not specify that the silver alloy would be used as "A sputtering target", the Examiner notes that this recitation would not limit the structure of the silver alloy. MPEP 2111.02 II.

Alternatively, Okamura ('530) discloses that a silver or silver containing alloy would be used as a sputtering target in order to enable the metal film layers consisting of silver or silver-containing alloy and the high-reflective-index transparent film layers to be formed easily, repeatedly, and continuously (col. 11, line 45 – col. 12, line 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the silver alloy, as disclosed by Carrano et al. ('652), as a sputtering target as disclosed by Okamura ('530), in order to enable the metal film layers consisting of silver or silver-containing alloy and the high-reflective-index transparent film layers to be formed easily, repeatedly, and continuously, as disclosed by Okamura ('530) (col. 11, line 45 – col. 12, line 8).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carrano et al. (US 6,139,652) as applied to claim 1 above, and further in view of Shibata et al. (US 6,338,889).

In regards to claim 7, Carrano et al. ('652) disclose a silver alloy composition as shown above, but Carrano et al. ('652) do not specify that the silver alloy would be used in an optical recording medium having a reflection coating consisting of the silver alloy.

Shibata et al. ('889) discloses that a silver metal or silver alloy would be preferred for an optical information recording disc in order to have a light reflecting layer that would have a high reflection to the laser light (abstract and col. 6, lines 14-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the silver alloy composition, as disclosed by Carrano et al. ('652), for the light reflecting layer of the optical information recording disc, as disclosed by Shibata et al. ('889), in order to achieve a high reflection to the laser light, as disclosed by Shibata et al. ('889) (col. 6, lines 14-35).

Response to Arguments

Applicant's arguments filed 6 August 2008 have been fully considered but they are not persuasive.

First, the Applicant primarily argues that "[t]he text of Carrano ('652) discloses only silver alloys consisting of silver and 'an element, or an oxide of an element, selected from' the listed metals. Therefore, this cited text discloses only Ag-In alloys and Ag-Sn alloys, but not Ag-In-Sn alloys.

In response, the Examiner notes that Carrano ('652) discloses (Tables 1-3 and col. 3, lines 22-42) tertiary alloys having at least 99.5 weight percent silver wherein the other two metals would be selected from the group of aluminum, antimony, cadmium, gallium, germanium, indium, lithium, manganese, magnesium, silicon, tin, titanium, and zinc. Furthermore, "a" or "an" are indefinite articles that carry the meaning of one or more. *Baldwin Graphic Systems Inc. v. Siebert Inc.* 85 USPQ2d 1503.

Second, the Applicant primarily argues that "The Office has improperly concluded that since Al, Mn, Li and Mg may be combined in Carrano ('652) that the art teaches one to combine any two of the elements. The Office, however, has cited absolutely nothing in the prior art which indicates this. Carrano only states "an element" is added to silver, and then provides examples where a small number of the elements are combined. No reason is given for the combination which are made and there is no hint whatsoever that any other elements should be combined, much less In and Sn."

In response, there is no teaching in Carrano ('652) that only Al, Mn, Li, and Mg may be combined within the silver-base alloys. Thus, the broad disclosure of Carrano ('652) would lead one of skill in the art to use any combination of these alloys to form binary or tertiary silver-base alloys having at least 99.5 weight percent silver. Furthermore, "a" or "an" are indefinite articles that carry the meaning of one or more. *Baldwin Graphic Systems Inc. v. Siebert Inc.* 85 USPQ2d 1503.

Third, the Applicant primarily argues that MPEP 2123 (I) instructs one to consider non-preferred embodiments or optional embodiments that are disclosed in a reference as part of the prior art. It does not instruct the Office to consider embodiments that are

not disclosed and make up embodiments using hindsight that is not disclosed or described in any way and are not mentioned or even hinted at in the reference.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Fourth, the Applicant primarily argues that Okamura et al. ('530) does not provide any related evidence or any motivation to change the teachings of Carrano ('652) regardless of the uses for silver alloys.

In response, Okamura ('530) discloses that a silver or silver containing alloy would be used as a sputtering target in order to enable the metal film layers consisting of silver or silver-containing alloy and the high-reflective-index transparent film layers to be formed easily, repeatedly, and continuously (col. 11, line 45 – col. 12, line 8).

Fifth, the Applicant primarily argues that Shibata ('889) is cited for using silver alloys for optical information recording disc reflective layers and this information does not inform the art concerning the alloys claimed and does not provide the specific motivation necessary to modify Carrano ('652) as needed.

In response, Shibata et al. ('889) discloses that a silver metal or silver alloy would

be preferred for an optical information recording disc in order to have a light reflecting layer that would have a high reflection to the laser light (abstract and col. 6, lines 14-35). Therefore, the combination of Shibata et al. ('889) with Carrano ('652) would have been obvious because both references are directed to the field of silver-base alloys.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessee Roe whose telephone number is (571) 272-5938. The examiner can normally be reached on Monday-Friday 7:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John P. Sheehan/
Primary Examiner, Art Unit 1793

JR